LucasMilhaupt®
A Handy & Harman Company
Global Brazing Solutions®

Technical Data Sheet

COMMERCIAL GRADE FINE GOLD
(99.90% minimum gold)

NOMINAL COMPOSITION

Gold	99.90% Min. (Several different grades available)

PHYSICAL PROPERTIES

Color	Gold
Melting Point (Solidus)	1947°F (1064°C
Flow Point (Liquidus)	1947°F (1064°C)
Brazing Temperature Range	1947°F - 2047°F (1064°C - 1119°C)
Specific Gravity	19.32
Density (Troy oz/in^3)	10.18
Electrical Conductivity (%IACS) [(1)]	73.4
Electrical Resistivity (Microhm-cm)	23.4

[(1)] IACS = International Annealed Copper Standard

PRODUCT USES

Commercial grade fine gold is widely used in numerous electrical, electronic, and industrial applications, such as waveguides assemblies, transistors units and circuit boards. Gold has been readily used in coating and spattering applications in numerous electrical and industrial applications. Commercial grade fine gold has been extensively used in dental and jewelry applications as well.

BRAZING CHARACTERISTICS

Gold is generally selected for its favorable thermal and electrical conductivity properties, as well as for its good resistance to oxidation and corrosive attack. It also exhibits excellent ductility and is easily joined by welding or brazing.

PROPERTIES OF BRAZED JOINTS

The properties of a brazed joint are dependent upon numerous factors including base metal properties, joint design, metallurgical interaction between the base metal and the filler metal.

AVAILABLE FORMS

Wire, strip, engineered preforms, specialty preforms per customer specification, powder and paste.

SPECIFICATIONS

Commercial grade fine gold conforms to the following specifications: N/A

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APPLICABLE PRODUCT CODE(S)

The applicable Lucas-Milhaupt product code(s) for this technical data sheet: 51-000.

SAFETY INFORMATION

The operation and maintenance of brazing equipment or facility should conform to the provisions of American National Standard (ANSI) Z49.1, "Safety in Welding and Cutting". For more complete information refer to the Material Safety Data Sheet for Commercial Grade Fine Gold.

WARRANTY CLAUSE

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